

CLAIMS

What is claimed is:

1. A colored coating for an article comprising:
a first layer of polymeric coating material with a transparent base which has been pigmented to a desired color before being extruded resulting in a semitransparent layer; and
a transparent second layer of polymeric coating material with a transparent base which is co-extruded with said first layer.
2. A colored coating for an article as described in claim 1, having a third layer of polymeric coating material which is co-extruded with said first layer, said third layer being more opaque than said first layer.
3. A colored coating for an article as described in claim 2, wherein said third layer has an opaque base.
4. A colored coating for an article as described in claim 2, wherein said third layer has an off color from the color of said first layer.
5. A colored coating for an article as described in claim 2, wherein said third layer has an on color from the color of said first layer.
6. A colored coating for an article as described in claim 2, having an adhesive layer which is co-extruded with said third layer.

7. A colored coating for an article as described in claim 1, wherein the transparent base of said first and second layers are ionomers.

8. A colored coating for an article as described in claim 1, wherein the transparent base of the second layer has a clarity when cured of 3.0 haze number or lower.

9. A colored coating for an article as described in claim 8, wherein the transparent base of the second layer has a scratch and mar performance that is substantially equal to or superior to the performance of a hard coat elastomeric paint.

10. A colored coating for an article as described in claim 8, wherein the transparent base of the first and second layers is selected from the group of polymers consisting of acrylics, Polyvinylidene Fluorides, urethanes, polycarbonates, and ionomers.

11. A colored coating for an article as described in claim 1, further including metallic flakes positioned within said extruded first layer of polymeric coating material.

12. A colored coating for an article as described in claim 11, wherein said metallic flakes are concentrated toward an upper surface of said first layer by heating the first layer before co-extruding said first and second layers.

13. A colored coating for an article as described in claim 1, wherein said second layer is tinted to modify the appearance of said first layer as seen through said second layer.

14. A coating for an exterior surface of an automotive vehicle body panel comprising:
a first layer of ionomer polymeric coating material with a transparent base which has been pigmented to a desired color and extruded;
a second layer of transparent ionomer polymeric coating material with a transparent base which has been co-extruded with said first layer having a thickness less than that of said first layer;
a third layer of polymeric coating material co-extruded with said first layer opposite said second layer, said third layer being more opaque than said second layer.

15. An exterior body panel for an automotive vehicle part comprising:
a body structure substrate;
a color coating joined to said body structure, said coating including
a first layer of polymeric material with a transparent base which has been pigmented to a desired color and then having been extruded, and
a second layer of polymeric material with a transparent base which is co-extruded with said first layer.

16. An exterior body panel for an automotive vehicle body as described in claim 15, wherein said color coating additionally has a third layer of polymeric material which is more opaque than said first layer of polymeric material, said third layer of polymeric material being co-extruded with said first layer of polymeric material generally opposite said second layer of polymeric material.

17. An exterior body panel for an automotive vehicle body as described in claim 16, wherein said body structure substrate is fabricated from said polymeric material which has been injection molded adjacent to said coating adjacent said third layer.

18. An exterior body panel for an automotive vehicle body as described in claim 15, wherein said body structure substrate is a polymeric preform.

19. An exterior body panel for an automotive vehicle body as described in claim 15, wherein said body structure substrate is fabricated from said polymeric material which has been injection molded adjacent to said coating adjacent said first layer.

20. An exterior body panel for an automotive vehicle body as described in claim 15, further including metallic flakes positioned within said extruded first layer of polymeric material.

21. A method of producing a colored coating for an article comprising:
pigmenting a first supply of clear base polymeric material to a desired color;
extruding the pigmented first supply of polymeric coating material into a first layer; and
extruding a second supply of transparent clear base polymeric coating into a second layer, said second layer being co-extruded with said first layer.

22. A method of producing a colored coating for an article as described in claim 21, wherein the transparent base of the second layer has a clarity when cured of about 3.0 haze number or lower.

23. A method of producing a colored coating for an article as described in claim 22, wherein the transparent base of the second layer has a scratch and mar performance that is substantially equal to or superior to the performance of an elastomeric paint.

24. A method of producing a colored coating for an article as described in claim 22, wherein the transparent base of the first and second layers is selected from the group of polymers consisting of acrylics, Polyvinylidene Fluorides, urethanes, polycarbonates, and ionomers.

25. A method of producing a colored coating for an article as described in claim 24, wherein the transparent base of the second layer is an ionomer.

26. A method of producing a colored coating for an article as described in claim 25, wherein the transparent base of the first layer is an ionomer.

27. A method of producing a colored coating for an article as described in claim 21, further including co-extruding a third supply of polymeric material with said first layer generally opposite said second layer, said third layer being more opaque than said first layer of polymeric material.

28. A method of producing a colored coating for an article as described in claim 21, further including adding reflective metallic flakes to the first supply of polymeric coating material.

29. A method of producing a colored coating for an article as described in claim 28, further including drying the reflective flakes to a moisture content of less than 200 ppm before adding the reflective flakes to the first supply of polymeric coating material.

30. A method of producing a colored coating for an article as described in claim 28, further including passing the first supply of polymeric coating material into an extrusion die and heating an upper surface of said first polymeric coating material in said die before co-extrusion with said second layer.

31. A method of producing a colored coating for an article as described in claim 21, wherein the step of pigmenting a first supply of clear base polymeric material to a desired color includes drying the polymeric material to a moisture content of less than about 500 ppm, drying pigments to a moisture content of less than about 200 ppm, and mixing the pigments with the first supply of clear base polymeric material.

32. A method of producing a colored coating for an article as described in claim 27, wherein said co-extruded first, second, and third polymeric materials form a coating sheet and further including cutting the sheet into segments for flat storage.

33. A method of producing a colored coating for an article as described in claim 21, wherein the second supply of clear base polymeric material has a scratch and mar performance that is substantially equal to or superior to the scratch and mar performance of an elastomeric paint.

34. A method of producing a colored coating for an article as described in claim 33, wherein the first and second supply of clear base polymeric material are ionomers.

35. A method of producing an article with a colored polymeric coating comprising:
producing a coating having a first layer of polymeric coating material disposed between a second layer of polymeric coating material and a third layer of polymeric material, including
pigmenting a first supply of transparent base polymeric material to a desired color;
extruding the pigmented first supply of transparent base polymeric coating material into a first layer;
extruding a second supply of transparent base polymeric coating into a second layer, said second layer being co-extruded with said first layer; and
coupling the coating to an article substrate so that said first layer of polymeric material is between said substrate and said second layer of polymeric coating material.

36. A method of producing an article with a colored polymeric coating as described in claim 35, wherein the step of producing a coating further includes co-extruding a third supply of polymeric material with said first and second layers, said third supply of polymeric material being more opaque than said first layer of polymeric material, said first layer positioned between said third layer and said second layer.

37. A method of producing an article with a colored polymeric coating as described in claim 35, wherein the transparent base of the polymeric coating material of said first and second layers is selected from the group of polymers consisting of acrylics, Polyvinylidene Fluorides, urethanes, polycarbonates, and ionomers.

38. A method of producing an article with a colored polymeric coating as described in claim 37, wherein the transparent base polymeric material of the first and second layers are ionomers.